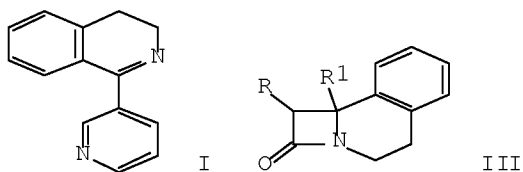


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 TITLE: Studies on fused β -lactams: synthesis and
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AB Coupling of nicotinic acid with $\text{PhCH}_2\text{CH}_2\text{NH}_2$ gives N-(2-phenylethyl)pyridine-3-carboxamide which on Bischler-Napieralski cyclization affords the imine I in a good yield. A similar sequence of reactions of 5-carboxyquinoline yields 1-(5-quinolyl)-3,4-dihydroisoquinoline (II). Annulation of I with RCH_2COCl [$\text{R} = \text{PhO}$, 4-MeC₆H₄O, 2,4-Cl₂C₆H₃O, 2-naphthyloxy, 3,4-(MeO)₂C₆H₃O, EtO₂CCH:CM₂NH] affords the β -lactams III ($\text{R}_1 = 3\text{-pyridyl}$) as single stereoisomers. Similarly, II furnishes ($\text{R}_1 = 5\text{-quinolyl}$). III have bactericidal activity at $\geq 125 \mu\text{g/mL}$.
 IT 118990-93-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and cyclization of)
 RN 118990-93-5 CAPLUS
 CN 5-Quinolinecarboxamide, N-(2-phenylethyl)- (9CI) (CA INDEX NAME)

